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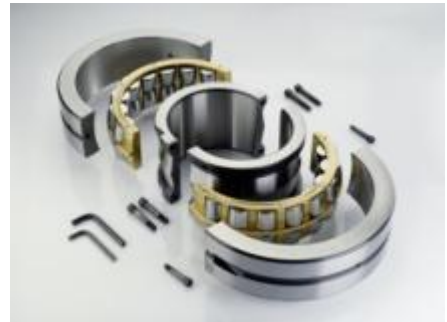
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■ **Split Bearings: Saving Costs and Time When Replacing Bearings in Conveyor Belts**

Replacing spherical roller bearings in conveyor belts is often a difficult and time-consuming procedure, leading to extended downtimes. For this reason, one customer was delighted recently when Schaeffler presented it with FAG split spherical roller bearings, which make it possible to simply and quickly replace bearings. Using the split bearing version will save the customer approx. **150,000 euros**.

The customer – a cement producer operating on a global scale – was looking for a way to decrease downtimes when replacing bearings in the conveyor belt. The customer’s bearing supplier and service provider was not able to deliver a suitable solution. Schaeffler introduced the customer to the FAG split spherical roller bearings. Due to their split design, it is possible for these bearings to be installed in the existing housing without major disassembly work, which reduces both downtimes and additional general assembly expenses.



In numbers:

Bearing replacement using standard bearings	
Downtime	22 h
Labor costs:	€ 2 600
Bulk carrier chartered to transport cement:	€ 9 000
Production losses:	€ 162 000
Total	€ 173 600
Bearing replacement using FAG split spherical roller bearings	
Downtime:	3 h
Labor costs:	€ 500
No alternative way of transportation required:	€ 0
Production losses:	€ 21600
Total:	€ 22100
Cost savings:	€ 151 500

The details of this customer solution have been provided at the following link as a global technology solution:

<http://www.schaeffler.de/content.schaeffler.de/en/mediathek/library/library-details.jsp?id=46377666>

You can find all other solutions here: <http://www.schaeffler.com/gts>

For further information, please contact your Schaeffler sales team.



■ **Proven to be better: the New X-life Standard for Axial Angular Contact Ball Bearings ZKL...:**

- **Bearings for ZKLN and ZKLF Screw Drives in X-life Quality
Longer Operating Life, Increased Speeds**

The ZKLN and ZKLF double-row axial angular contact ball bearings will only be produced in **X-life quality as of the beginning of 2014**. The new designs will successively replace the previous products.

X-life is a seal of quality for particularly high-capacity products of the INA and FAG brands. They stand out thanks to their longer operating life, which is the result of dynamic load ratings that are greater than those of the previous standard.

X-life quality offers optimized contact surfaces between the rolling elements and raceway. They make for less friction in the bearing and permit higher limiting speeds. Energy consumption and operating costs are reduced. X-life bearings play a pivotal role in improving the overall cost-effectiveness of the application.

For ZKLN and ZKLF double-row axial angular contact ball bearings, technical optimizations brought about a 10% rise in the dynamic load rating. This means a considerable increase in the nominal operating life of up to 33%. Therefore, the operating life of the angular contact ball bearings is extended under identical operating conditions. Conversely, the bearing support can bear heavier loads without affecting the specified operating life. With these bearings in X-life design, therefore, the designer has additional options when designing the bearing support.

Along with improvements to the surfaces, the bearing ring material is subjected to a special heat treatment. This makes the raceways of the inner and outer rings more resistant to solid particles and mixed friction. This in turn extends the operating life of the grease, since less lubricant is needed.



Fig. 1: ZKLN and ZKLF axial angular contact ball bearings in X-life design: increased customer value at the same price



The bearing designations for screw drives in **X-life quality** receive the suffix **XL**.

The same less stringent versions (**PE suffix**) from the existing product line will continue to be available.

The new publication “**Bearings for Screw Drives in X-life Quality: Longer Operating Life, Higher Speeds**” (SSD 32) contains further information and can be found in our media library in various languages (German/English/Chinese/Japanese) at the following link:
<http://www.schaeffler.de/content.schaeffler.de/en/mediathek/library/library-details.jsp?id=37627137>.

For further information, please contact your Schaeffler sales team.



■ New Plug & Play Accessories for FAG SmartCheck

FAG SmartLamp and **FAG SmartConnectBox** are now available as the ideal additions to the compact FAG SmartCheck oscillation sensor. With FAG SmartLamp, the alarm status is visible from a distance; while the FAG SmartConnectBox makes for the simple distribution of additional signals.

FAG SmartLamp

The most important characteristics and features at a glance:

- The perfect accessory for a simple alarm function when, for instance, the unit is enclosed or FAG SmartCheck is not directly visible.
- Perfectly suitable for displaying the status of, for example, isolated fans, electric motors, pumps, or compressors
- Patented LED technology
- Able to be mounted almost anywhere by means of fastening brackets
- Equipped with a standard cable and M12 plug connector

Advantages:

- Machine condition visible from a long distance
- No configuration necessary
- Plug & play
- Simple installation
- Low installation costs



FAG SmartConnectBox

The most important characteristics and features at a glance:

- The ideal accessory for distributing additional signals, such as speeds, load, etc.
- Suitable for connecting:
 - a local speed sensor
 - up to max. four FAG SmartCheck units
 - one FAG SmartLamp
- Equipped with a standard cable and M12 plug connector
- Sturdy, splash-proof aluminum housing (IP66)

Advantages:

- Easy to connect
- Plug & play
- Can be used in harsh ambient conditions



For further information, please contact your Schaeffler sales team.